AMENDMENTS TO CLAIMS

1. (Original) A method for improving the permeability of a well, the method comprising:

selecting a well suspected of containing polymer deposits; and pumping a well treatment composition into the well, wherein the composition comprises water, a buffer, and hydrogen peroxide or a per-acid.

- (Original) The method of claim 1, further comprising:
 measuring the permeability of the well prior to the pumping step; and
 measuring the permeability of the well after to the pumping step.
- 3. (Original) The method of claim 2, wherein the permeability of the well after to the pumping step is greater than the permeability of the well prior to the pumping step.
- 4. (Original) The method of claim 1, wherein the composition has a pH of about 3 to about 5.
- 5. (Original) The method of claim 1, wherein the buffer comprises acetic acid and an acetate salt.
- 6. (Original) The method of claim 5, wherein the acetate salt is sodium acetate, potassium acetate, or ammonium acetate.
- 7. (Original) The method of claim 1, wherein the buffer comprises formic acid and a formate salt.
- 8. (Original) The method of claim 7, wherein the formate salt is sodium formate, potassium formate, or ammonium formate.
- 9. (Original) The method of claim 1, wherein the buffer comprises citric acid and a citrate salt.
- 10. (Original) The method of claim 9, wherein the citrate salt is sodium citrate, potassium citrate, or ammonium citrate.
- 11. (Original) The method of claim 1, wherein the per-acid is peroxyacetic acid.
- 12. (Original) The method of claim 1, wherein the concentration of hydrogen peroxide in the composition is about 1 weight percent to about 6 weight percent.

- 13. (Original) The method of claim 1, wherein the concentration of per-acid in the composition is about 1 weight percent to about 15 weight percent.
- 14. (Original) The method of claim 1, wherein the composition further comprises a peroxidase enzyme.
- 15. (Original) The method of claim 1, wherein the composition further comprises a phosphate salt or a phosphonate salt.
- 16. (Original) The method of claim 1, wherein the composition further comprises an iron-control agent, a surface tension reducer, a dispersant, a corrosion inhibitor, or a clay stabilizer.

17-31. (Cancelled)